

Digital Preservation and COPPUL Libraries

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Statement of need:

We are at risk of losing key parts of our digital content in the near term unless we take immediate steps to fill in some of the gaps relating to our policies, technology, and resources. If the content is worth creating or licensing, it is also worth making sure that it is going to be available and usable five, ten, or two hundred years from now.

Definition of digital preservation:

Preserving digital content entails far more than making backup copies and storing them in disparate locations. Digital preservation is a series of managed activities necessary for ensuring both the long-term maintenance of the files and continued accessibility of their contents. Designed to extend the usable life of machine-readable files and protect them from media failure, physical loss, and hardware and software obsolescence, these activities include:

- ensuring the long-term maintenance of a bitstream (the zeros and ones):
 - backing up files and keeping a copy at an offsite location
 - running checks to track the deterioration of storage media, files or bitstreams
- providing continued accessibility of the contents:
 - viability - making sure that information is intact and readable from the storage media
 - renderability - making sure that information is viewable by humans and able to be processed by computers
 - understandability – making sure that information is able to be interpreted by humans

Attributes of a Trusted Digital Repository (TDR):

A trusted digital repository is one whose mission is to provide reliable, long-term access to managed digital resources for a designated community, now and in the future. Its attributes are:

- Administrative responsibility
 - make explicit commitment to the development of a TDR that complies with prevailing standards, policies, and practices that can be audited and measured
- Organizational viability
 - demonstrate that its organizational mission, legal status, and operations are sufficient to support a TDR
- Financial sustainability
 - establish and can sustain a sound financial base for the TDR
- Technological and procedural suitability
 - avoid technological obsolescence of hardware and software needed to create, store, and access digital content
- System security
 - ensure the reliable operation of the TDR by adopting appropriate security measures
- Procedural accountability
 - establish a systematic approach and supporting techniques to provide comprehensive documentation of all relevant policies, procedures, and practices
- OAIS (Open Archival Information System) compliance

Next steps for COPPUL:

- Charge a working group to:
 - Draft a digital collections mission statement for COPPUL libraries
 - Undertake a study and make recommendations regarding the preservation of digital content in COPPUL institutions
 - Conduct a gap analysis of our digital collections strategy and infrastructure
 - Investigate and arrange for a workshop for COPPUL members on digital preservation
 - Inventory all digital content being created or licensed by COPPUL members
 - Revise or draft digital collections mission statement for COPPUL review
 - Draft key policies related to digital collections

Essential Background Information:

Digital Preservation Management Tutorial by Cornell University Libraries

<http://www.library.cornell.edu/iris/tutorial/dpm/index.html>

OAIS Reference Model by NASA's Consultative Committee for Space Data Systems

(<http://ssdoo.gsfc.nasa.gov/nost/wwwclassic/documents/pdf/CCSDS-650.0-B-1.pdf>)

Trusted Digital Repositories : Attributes and Responsibilities : An OCLC-RLG Report

(<http://www.rlg.org/longterm/repositories.pdf>)